UNIT STATES ENVIRONMENTAL PROTECT AGENCY

ORIGINAL TO FILE

DATE: FEB 2 0 1981

SUBJECT: Reilly Tar and Chemical Corporation, St. Louis Park, Minnesota
Potential Settlement Strategy

TO FROM: Melanie Toepfer NST
Engineering Section

FROM TO: Kenneth A. Fenner, Chief
Water & Hazardous Materials
Enforcement Branch

For your file

As you know, Reilly has made an offer to EPA through Tom Berg for settlement of the civil lawsuit. Reilly's offer consists of $1,000,000 (monetary relief, not services) in exchange for a release from liability. We do not believe such an offer to be adequate for the reasons outlined below:

1. Julie Parzen, EPA-HQ-Office of Enforcement, has completed an economic assessment of the Reilly Tar and Chemical Corporation based on a 1978 Dun and Bradstreet report. Reilly is a closely held corporation and therefore, the economic analysis necessitated that certain assumptions be made. Parzen's assessment concluded that Reilly can afford to pay a maximum of $5,000,000/year; probably not a one-time huge cash outlay. This assessment assumed a 39% profit margin for chemical industrial facilities. Reilly's actual profit figures are not publicly available and therefore, there may be some error in this assessment.

2. Ecology and Environment, Inc. (FIT), has prepared a cost-estimate report for me based on several categories of relief outlined in the first draft of an EPA-Reilly consent decree. These categories are:

A. Treatment of the St. Louis Park water supply

B. Multiaquifer wells, including W-23 and W-105 (on-site)

C. Soil contamination

D. Barrier wells (Gradient control wells)

E. Well Field Management (Monitoring)

The total clean-up is estimated to cost between $167,000,000 and $272,000,000. (Many assumptions were made to generate such cost information; alternative remedial methods may be investigated in the future.)

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These clean-up costs may be summarized as follows:

A. Treatment of the St. Louis Park water supply.

Note--On February 18, 1981, Hopkins municipal well No. 3 was closed down due to PAH contamination. This well is the first municipal supply well to be contaminated and closed. Well No. 3 is located to the southwest of the Reilly site, less than 1.25 miles. It is a Prairie du Chien-Jordan well.

i. Carbon adsorption with regeneration

capital costs	$1,761,000
operation and maintenance (O&M) costs/year	$231,000

ii. Carbon adsorption without regeneration--powdered activated carbon (PAC)

capital costs	$913,000
O&M costs/year	$265,000
(disposal costs were not included)	

iii. Modification of an existing facility (e.g., W-15)

capital costs	$720,000
O&M costs/year	$90,000

Assuming option A.i.: capital costs = $1,761,000
O&M costs/year = $231,000

B. Multiaquifer wells, including W-23 (on-site Hinckley well) and W-105 (Sugar Beet well)

A multiaquifer well is one that allows leakage of contaminated water from one aquifer to another through the well casing. These leaks may be caused by inadequate construction of the well or cracks in the well casing. It has been hypothesized that multiaquifer wells have significantly contributed to the vertical flow of pollutants between the geologic formations underlying St. Louis Park. Such wells must be identified and sealed to prevent further pollutant movement. Two such wells, W-23 and W-105, have been identified on the former Reilly site. This remedial activity would be conducted in cooperation with the Minnesota Department of Health's Well Abandonment Program and would cost approximately $450,000.

C. Soil Contamination

These cost estimates are based on the Barr Engineering isopleths of soil contamination using phenol concentrations as the parameter of interest. This is the best summary of areal soil contamination information available at the present time. However, isopleths of phenolic concentrations are not sufficient and more polynuclear aromatic hydrocarbon (PAH) concentration isopleths need to be developed in the future.

The following prices assume: excavation of contaminated soils; disposal of these soils in a hazardous waste landfill; transportation costs to ship the contaminated soils to the Chicago Waste Management facility because there are no hazardous waste disposal sites in Minnesota presently; backfill; and dewatering expenses. Further, these costs assume 750 yd^3/day removal and 260 days/work-year. (See the attached table for cost information.)

D. Barrier wells (Gradient control wells)

These cost estimates assume installation of 3 barrier wells and 9 monitoring wells in each aquifer.

Construction and Installation costs

Drift	$ 39,225
Platteville	$ 53,490
St. Peter	$ 104,130
Prairie du Chien-Jordan	$ 403,560
Hinckley	$1,103,460
TOTAL	$1,704,000

The capital costs for the treatment of gradient control well water is estimated to be $4,930,000.

Total capital costs = $6,634,000

O&M costs/year (assumes $1,200,000 user charge to the City treatment plant) = $2,170,000

E. Well Management (Monitoring)

A significant amount of chemical analyses will be necessary throughout the life of the remedial programs to be undertaken relative to the Reilly site. It has been estimated that chemical analyses will cost between $7,000,000 and $16,000,000 ($320,000/year) over the next 50 years. The price differential is caused by the difference in the number of organic compounds analyzed for each sample.

Proposed Strategy

I would like to propose the following settlement and remedial strategy to you. EPA should negotiate with Reilly for remedial activities A, B, D and E above. Capital costs for these projects total approximately $9,100,000. Because of the large amount of construction required, this project might take two years to complete and thus be something that Reilly can afford. (I think that Reilly should be given the opportunity to actively pursue alternative remedial methods, so long as these alternatives fulfill the requirements above-described.) O&M costs/year for these activities--A, B, D and E--total approximately $2,750,000.

I believe the cost of soil excavation to be prohibitive. It seems more reasonable to pursue vaulting or fixation of the "hot spots," than excavation of the entire contaminated zone. I do recommend that soil contamination remedial activities be pursued by the Office of Superfund. It might be possible to negotiate a consent decree for items A, B, D and E with Reilly, and develop a Memorandum of Understanding with Reilly, filed with the court, for EPA soil contamination cleanup through Superfund.

The long term costs might be absorbed by Reilly through establishment of a trust, for example, (under supervision of the court) for future monitoring and O&M costs. The philosophy of such a trust would be consistent with the post-closure requirements of RCRA.

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
Tom Berg	H. Toepfer	2/27/81
		TIME 10⁰⁰ AM

SUBJECT

Reilly -

SUMMARY OF COMMUNICATION

Berg had a meeting w/ Schwartzbauer on 2/20/81 to discuss $F (CERCL) demand letter. Schwartzbauer will write back w/ Reilly's response next week. Anticipate that Reilly will say we don't have authority to make such a demand.

Berg told Reilly we might amend complaint.

Berg told Reilly to go ahead and file motion to dismiss, because we intend to proceed w/ litigation. We will have a draft consent decree ready in April and would like to negotiate w/ Reilly beginning ~ 5/1/81 if Reilly willing.

Berg concerned because we have no tap water samples. Spoke to Steve Shakman. Steve is going to give him a lab tour, etc. next week.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

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INFORMATION COPIES
TO: